

ABSTRACT OF THE DISCLOSURE

Lens structures for flux re-distribution and for optical low pass filtering. The lens structure has a surface that includes a seamless profile, which is devoid of cusps. The surface includes a plurality convex elements and concave elements  
5 (e.g., an array of alternating elements and concave elements). The convex elements include a positive surface curvature area, and the concave elements include a negative surface curvature area. The lens structure can include a surface for producing a controlled amount of under-corrected spherical aberration and over-corrected spherical aberration.